

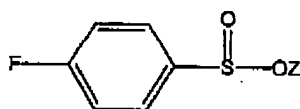
Serial No. 10/682,530

Amendments to the Claims

The following Listing of Claims replaces all prior versions and listings of claims in this application:

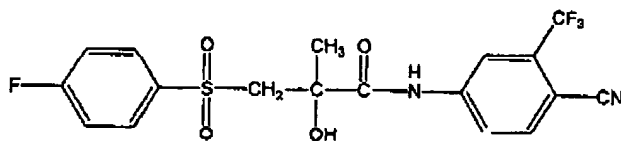
Listing of Claims:

Claim 1 (currently amended). A process for making bicalutamide, which comprises reacting a compound of formula (2)



(2)

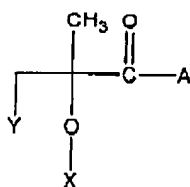
wherein Z represents a cation, with a suitable reaction partner to form a bicalutamide of formula (1):



(1)

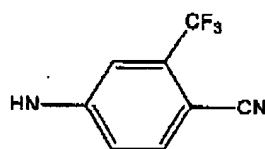
or a non-bicalutamide product and, if said reacting step produces said non-bicalutamide product, then converting said non-bicalutamide product to a bicalutamide of formula (1); wherein said suitable reaction partner is a compound of the formula (3), formula (3.1) or Formula (3.2):

Serial No. 10/682,530

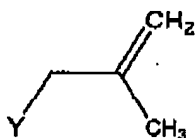


(3)

wherein A represents OR, in which R is a hydrogen, a C₁-C₆ alkyl, a C₃-C₆ cycloalkyl, a phenyl, or a benzyl group; or an aniline derivative of the formula:



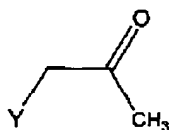
Y represents a leaving group and X represents hydrogen or X and Y join together to form a 3- to 6-membered heterocyclic ring or X and A join together to form a 5- to 10-membered fused or unfused heterocyclic ring with the proviso that if a ring nitrogen is present, it may be substituted by a 3-trifluoromethyl-4-cyano-phenyl group:



(3.1)

wherein Y is as defined for formula (3);

Serial No. 10/682,530



(3.2)

wherein Y is as defined for formula (3).

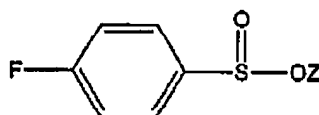
Claim 2 (cancelled).

Claim 3 (Original). The process according to claim 1, wherein Z is a cation selected from the group consisting of alkali metals, magnesium halides, and ammoniums.

Claim 4 (Original). The process according to claim 3, wherein Z is a sodium cation.

Claim 5 (Original). The process according to claim 1, wherein said reacting step is carried out in a bi-phasic reaction system or in a lower alcohol.

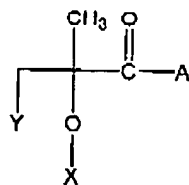
Claim 6 (Original). A process, which comprises reacting a compound of formula (2)



(2)

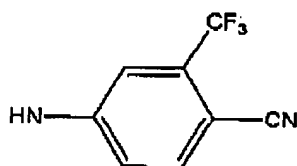
wherein Z represents a cation; with a compound of formula (3)

Serial No. 10/682,530

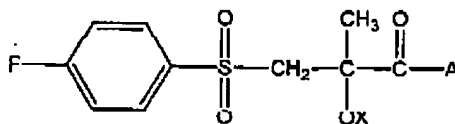


(3)

wherein A represents OR, in which R is a hydrogen, a C₁-C₆ alkyl, a C₃-C₆ cycloalkyl, a phenyl, or a benzyl group; or A represents an aniline derivative of the formula:



Y represents a leaving group and X represents hydrogen or X and Y join together to form a 3- 6-membered heterocyclic ring or X and A join together to form a 5- to 10-membered fused or unfused heterocyclic ring with the proviso that if a ring nitrogen is present, it may be substituted by a 3-trifluoromethyl-4-cyano-phenyl group; to form a compound of the formula (4):



(4)

wherein A and X have the same meaning as in formula (3).

Serial No. 10/682,530

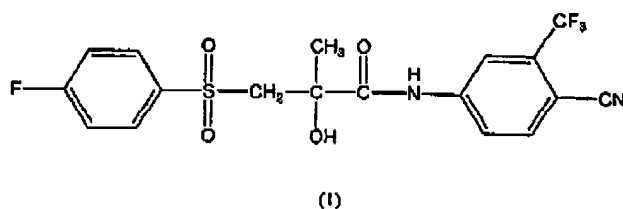
Claim 7 (Original). The process according to claim 6, wherein Z is a cation selected from the group consisting of alkali metals, magnesium halide, and ammonium.

Claim 8 (Original). The process according to claim 6, wherein Y represents a halogen or a group of the formula $-\text{OS}(\text{O})_2\text{R}^2$, wherein R^2 represents a hydroxyl group, a C_1 - C_4 alkyl group, a phenyl group, or an alkyl-substituted phenyl group.

Claim 9 (Original). The process according to claim 8, wherein Y represents a group selected from the group consisting of iodine, chlorine, bromine, methanesulfonyloxy, and toluenesulfonyloxy.

Claim 10 (Original). The process according to claim 6, wherein Y and X join together to complete an oxiran ring.

Claim 11 (Original). The process according to claim 6, wherein A is said aniline derivative and said compound of formula (4) is a bicalutamide of formula (1):



Claim 12 (Original). The process according to claim 11, wherein said compound of formula (3) is optically active and said bicalutamide is enriched R-bicalutamide.

Claim 13 (Original). The process according to claim 11, wherein said produced bicalutamide is

Serial No. 10/682,530

racemic bicalutamide and which further comprises isolating the R-bicalutamide isomer therefrom.

Claim 14 (Original). The process according to claim 11, wherein Y represents a group selected from the group consisting of iodine, bromine, chlorine, methanesulfonyloxy, and toluenesulfonyloxy.

Claim 15 (Original). The process according to claim 14, wherein Y is bromine or iodine.

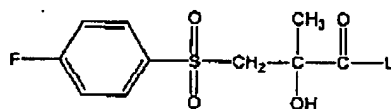
Claim 16 (Original). The process according to claim 11, wherein Y and X together complete an oxiran ring.

Claim 17 (Original). The process according to claim 15, wherein Z is a sodium cation.

Claim 18 (Original). The process according to claim 16, wherein Z is a sodium cation.

Claim 19 (Original). The process according to claim 6, wherein A is OR.

Claim 20 (Original). The process according to claim 19, which further comprises converting said compound of formula (4) to a compound of formula (4.1)



(4.1)

wherein L represents a leaving group for an amidation reaction.

Claim 21 (Original). The process according to claim 20, wherein L represents a halogen; a group of the formula OS(O)₂-R², wherein R² represents a hydroxyl group, a C₁-

Serial No. 10/682,530

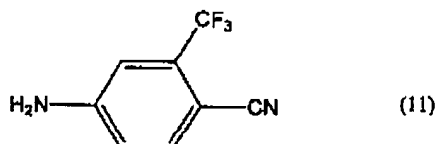
C₄ alkyl group, a phenyl group, or an alkyl-substituted phenyl group; a mixed anhydride group of formula -O-C(O)-R³, wherein R³ is a C₁-C₄ alkyl group or a phenyl group, each optionally substituted by one or more halogens; or an activated ester group.

Claim 22 (Original). The process according to claim 21, wherein R³ represents a group selected from the group consisting of trifluoromethyl, tert-butyl, isobutyl and o-dichlorophenyl group.

Claim 23 (Original). The process according to claim 21, wherein L represents a halogen or a group of the formula -OS(O)₂-R², wherein R² represents a hydroxyl group, a C₁-C₄ alkyl group, a phenyl group, or an alkyl-substituted phenyl group.

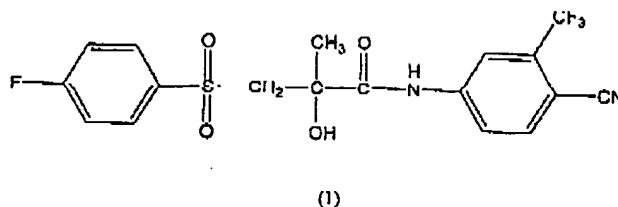
Claim 24 (Original). The process according to claim 23, wherein L represents a group selected from the group consisting of bromine, chlorine, methanesulfonyloxy, and toluenesulfonyloxy.

Claim 25 (Original). The process according to claim 20, which further comprises reacting said compound of formula (4.1) with an amine of the formula (11):



to form a bicalutamide of formula (1):

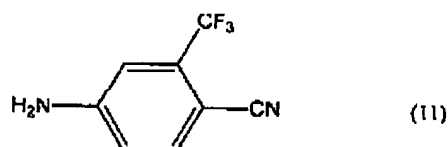
Serial No. 10/682,530



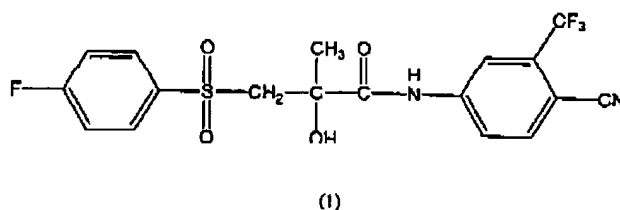
Claim 26 (Original). The process according to claim 25, wherein said compound of formula (3) is optically active and said bicalutamide is enriched R-bicalutamide.

Claim 27 (Original). The process according to claim 25, wherein said produced bicalutamide is racemic bicalutamide and which further comprises isolating the R-bicalutamide isomer therefrom.

Claim 28 (Original). The process according to claim 19, which further comprises reacting said compound of formula (4) with an amine of the formula (11):



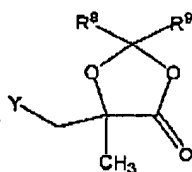
to form a bicalutamide of formula (1):



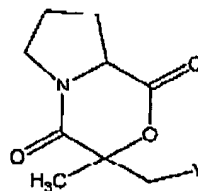
Serial No. 10/682,530

Claim 29 (Original). The process according to claim 28, wherein A represents hydrogen.

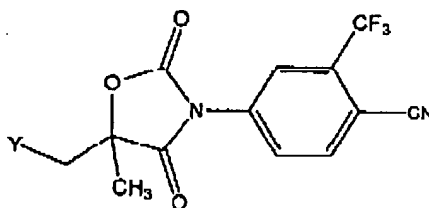
Claim 30 (Original). The process according to claim 6, wherein X and A together complete a ring to form a compound selected from the following formulae 3A-3C:



3A



(3B)

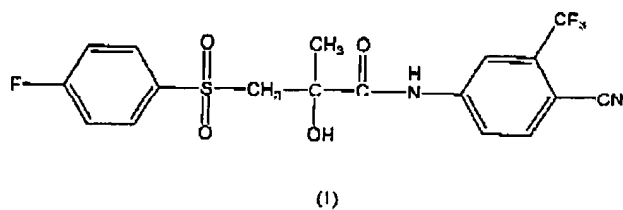


(3C)

wherein R⁸ represents a hydrogen, an C₁-C₆ alkyl or a C₃-C₆ cycloalkyl; R⁹ represents a C₁-C₆ halogenated alkyl; and Y is as defined for formula (3).

Claim 31 (Original). The process according to claim 30, which further comprises hydrolyzing said compound of formula (4) and forming a bicalutamide of formula (1):

Serial No. 10/682,530



Claim 32 (cancelled).